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CASE REPORT

A Very Rare Presentation of Tubal-Ovarian Torsion in A Patient with Endometrioma: A Case Report

Endometriomalı Bir Hastada Nadir Görülen Tubal ve Over Torsiyonu: Olgu Sunumu

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ABSTRACT

Endometriosis is increasingly diagnosed in women of reproductive age and is estimated to affect up to 10% of women. Endometrioma in rare cases occurs with an acute abdominal picture. However, adnexal torsion with endometrioma is very rare in such patients. A 38-year-old female patient was admitted to the outpatient clinic of the maternity department urgently with intermittent left groin pain lasting for four hours. The patient had intermittent pain and concomitant vomiting. Biochemical examination was evaluated within normal ranges. There were no abnormalities in the vital signs of the case. Ultrasound (US) imaging revealed endometrioma and heterogeneous images in the left adnexal space. Considering endometrioma torsion, emergency surgery was decided, and laparoscopy was planned. During the operation, endometrioma and tubal-ovarian torsion were observed in the left ovary. During the operation, it was detorsioned. Endometrioma cyst excision was performed. The patient was discharged from the hospital in good health. Torsion is very rare in cases with endometrioma. Endometriomas are often tightly adherent to neighboring structures, and therefore seem less likely to cause adnexal torsion, although there is insufficient data on the torsion rate in the cysts. With this case report, we considered contributing to the literature on torsion in endometrioma.
It should be kept in mind that patients with endometrioma have tubal-ovarian torsion, which can be seen very rarely if they present to the emergency department with an acute abdomen.

Keywords: Endometrioma, Laparoscopy, Tuba-ovarian torsion

ÖZ

Endometriozis üreme çağındaki kadınlarda giderek daha fazla teşhis edilmekte ve kadınların %10'unu etkilediği tahmin edilmektedir. Nadir vakalarda endometrioma akut karın tablosuyla birlikte görülür. Ancak bu hastalarda endometrioma ile adneksal torsiyon çok nadirdir. 38 yaşında bir kadın hasta, 4 saattir başlayan aralıklı sol kasık ağrısıyla acilen kadın doğum polikliniğine başvurdu. Hastada aralıklı ağrı ve eşlik eden kusma vardı. Biyokimyasal inceleme normal aralıklarda değerlendirildi. Yaşamsal bulgularında anormallik yoktu. Ultrason görüntülemede endometrioma ve sol adneksal boşlukta heterojen görüntüler ortaya çıktı. Endometrioma torsiyonu düşünülerek acil cerrahiye karar verildi. Laparoskopi planlandı. Operasyon sırasında sol overde endometrioma ve tuba-ovarian torsiyon görüldü. Operasyon sırasında detorsiyone edildi. Endometrioma kist eksizyonu yapıldı. Hasta iyileşmek üzere hastaneden taburcu edildi. Endometrioma vakalarında torsiyon çok nadirdir. Endometriomalar genellikle komşu yapılara sıkıca yapışıktır ve bu nedenle, bu kistlerdeki torsiyon oranı hakkında yeterli veri olmamasına rağmen, adneksal torsiyona neden olma olasılıkları daha düşük görünmektedir. Bu olgu sunumuyla, endometriomadaki torsiyon hakkındaki literatüre katkıda bulunmayı düşündük.
Endometrioma hastalarının akut karınla acil servise başvurduklarında çok nadir görülebilen tuba-ovaryan torsiyona sahip oldukları akılda tutulmalıdır.

Anahtar kelimeler: Endometrioma, Laparoskopi, Tuba-ovaryan torsiyon

Introduction

Endometriosis is the presence of endometrial glands and stroma outside the uterine cavity (1). Endometriosis affects 6–10% of women of reproductive age and may cause disturbances in the quality of life of women due to pain and infertility (2).

Endometriosis mainly occurs in pelvic organs, such as the peritoneum, ovary, and recto-vaginal septum. The pathogenesis and clinical entities are different from each specific anatomical lesion (3). Ovarian endometrioma may originate from adhesion between peritoneum and ovarian surface implants, and the pseudo cyst may be formed by incessant bleeding from endometriotic lesions (4). A variety of pain symptoms are associated with endometriosis, including dysmenorrhea, dyspareunia, dysuria, dyschezia, and chronic pelvic pain (5, 6). Adnexal torsion as a cause of pelvic pain is rare in endometrioma cases. Perhaps the reason for the absence of torsion in the cases of endometrioma may be their adhesion to the surrounding tissues. Therefore,

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we have presented this very rare case.

Case

Our case is a 38-year-old female patient. She had endometrioma for five years, which was previously diagnosed by healthcare professionals. There was no use of medication. She had a history of two cesarean deliveries. The patient was admitted to our emergency department with the complaint of episogenic inguinal pain starting four hours ago. The pain was intermittent and severe and considered to be associated with an episode of vomiting. There was no history of similar incidents in the past. There was no vaginal discharge, and the bowel and bladder habits were normal. The patient had undergone a cesarean section operation eight years ago. She had suffered from heavy menstruation previously.

C-reactive protein (CRP) values were within the normal range in the patient's biochemical tests. Even so, beta HCG revealed negativity. The leukocyte count gave a moderate elevation. Hemoglobin value was 9.7 gm/dL, and liver and kidney function tests were normal. Serum cancer antigen 125 was 194 IU/L, and serum cancer antigen 19-9 was 314 IU/L.

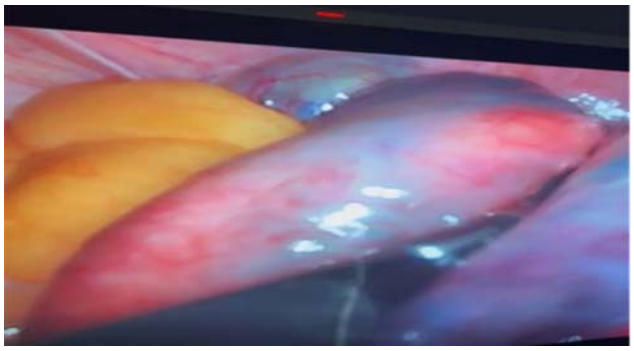
Abdominal ultrasound (US) suggests a large anechoic cystic lesion with dimensions of 6.79 cm x 5.41 cm (Figure 1), extending to the abdomen in the left adnexa, with

Figure 1. Preoperative ultrasound imaging: Endometrioma cyst and adjacent ovarian tissue with increased density

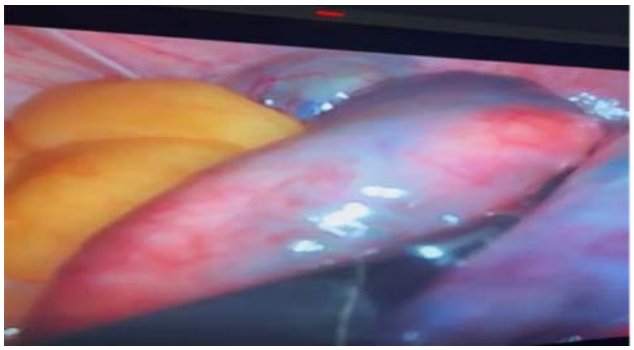
small septa with thin walls near the upper pole, without arterio-venous flow on color Doppler flow imaging. There was an increase in density in the ovarian tissue adjacent to the cyst. It was likely to be the ovarian torsion. The Doppler examination showed a decrease in ovarian flow. The other adnexal areas were normal. There was a 6-cm intramural myoma in the posterior part of the uterus. Since the patient's symptoms did not respond to the first injected analgesics, and as the US findings suggested ovarian torsion, an urgent laparoscopy decision was performed. Laparoscopy revealed that the left tube (Figure 2a) and ovary (Figure 2b) were torsioned. Interestingly, the torsion was detected in the left utero-ovarian ligament rather than the infundibulopelvic ligament, which was intact

Figure 2. Appearance within the surgery

a. The tuba is torsion and bruised

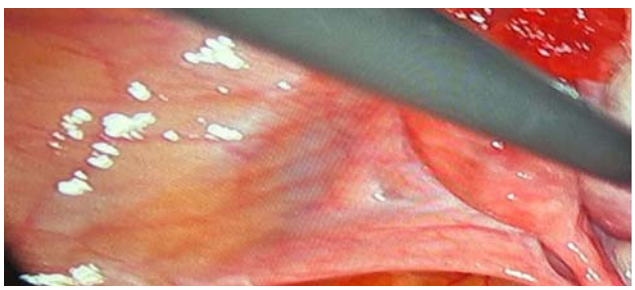


b. The ovary is edematous, enlarged, and bruised appearance



in this case. It was seen that the torsioned ligament rotated sideways parallel to its axis and was visibly blocked. After the ovarian pedicle was detorsioned, the ovary returned to its normal color and showed no signs of bleeding or necrosis (Figure 3). After the cysts were aspirated by the surgeon during the mobilization

Figure 3. View after intraoperative detorsion; The color of the ovary has come to a normal appearance



of the adnexes, the endometrioma ruptured, shedding a large amount of dark brown fluid into the peritoneal cavity. Then, a routine laparoscopic myomectomy was performed. The patient's postoperative course

was uncomplicated.

Discussion

Gynecological causes of acute abdomen in female patients can be varied. When we investigated the gynecological causes of acute pelvic pain in non-pregnant women, the gynecological causes of pelvic pain in such women include ovarian bleeding, ovarian torsion, pelvic inflammatory disease, endometriosis (especially deep infiltrating endometriosis), endometriomas, adenomyosis, and pelvic pain. Congestion syndrome may also be observed due to incorrectly positioned intrauterine contraceptive devices (7). Our patient had a 6-cm endometrioma in the left ovary. It was considered that she might have pain due to endometriosis.

Endometriosis is an important cause of chronic pelvic pain. The quality of endometriosis-related chronic pelvic pain varies widely. Affected menstruating individuals experience cyclical and non-cyclical pain, and dysmenorrhea; non-menstrual pain may sometimes be accompanied by dyschezia, dysuria, and, among those who are sexually active, dyspareunia. Pain may be felt throughout the pelvis and abdomen, and can be referred to the back and legs (8).

Our patient had menstrual pain. However, the pain starting in the last four hours was intermittent and was not a constant pain.

Acute abdominal or pelvic pain may be intermittent with or without nausea and vomiting, and fever may be the initial and main clinical manifestations of ovarian torsion both in children and female patients of reproductive age (9–11). Approximately 70% of women with ovarian torsion may have the symptoms of nausea and vomiting (12). In light of this information, the pain in our patient was intermittent, severe, and accompanied by vomiting, which led us to the preliminary diagnosis of endometrioma torsion.

İf pelvic pain persists in women with endometriosis, the clinician focuses on broadening hormonal therapy to accomplish the suppression of menses or initiates a hormonal therapy found to be effective in lessening endometriosis-associated pain (like gonadotropic-releasing agonists or antagonists rather than undertaking multiple surgeries); therefore, the clinician engages a multidisciplinary team for the management of the pain. Additional approaches to pain management may include such medications as acetaminophen, muscle relaxants, non-steroidal anti-inflammatory drugs (NSAIDs), and medications for neuropathic pain, including gabapentin, pregabalin, and duloxetine (13,1 4). If the patient's pain was persistent, we might consider medical treatment. The fact that the condition suggested the clinic of torsion pushed us to decide on surgical intervention.

Ovarian or adnexal torsion is an acute surgical emergency in which the ovary is partially or completely rotated along the axis of the pedicle, compromising blood flow. Torsion is rare, and its incidence is only 2.7%. Although it requires rapid and accurate diagnosis and treatment, it often creates diagnostic difficulties (15). While torsion may develop in a normal ovary in other respects, it also often occurs in a benign adnexal mass environment, which can act as a center of rotation around which the rest of the ovary and the extensive ligament can rotate. In the laparoscopic surgery of the patient, the tuba was torsion with the ovary. The ovary and tuba were relieved by detorsion and deposits.

Endometriosis accounts for 40-45% of pelvic pain (3). When combined with torsion, the pain becomes severe. It is difficult to detect additional torsion and make surgical decisions in a patient whose pain persists (4). It is very rare to see endometrioma with torsion. In a study, ovarian cysts were among the causes of torsion in 61.1%. In the sub-analysis of ovarian cysts, the most common cysts were detected as follows: 33.3% serous cysts, 22.2% dermoid cysts, and 5.6% mucinous cysts. In the sub-analysis, no endometrioma was observed (18). Based on the literature, the case presented here is extremely rare. We consider that endometrioma prevents torsion by creating adhesions to the tuba and surrounding tissues as a possible reason for this.

Conclusion

Endometriosis is increasingly being diagnosed among reproductive-aged women, and it is estimated to affect 10% of women (1). Endometrioma may present with acute abdominal pain. However, adnexal torsion in such patients is rare. Torsion should be considered in patients with endometrioma in case of sudden onset of intermittent pain and vomiting. In this case, the surgical option should be kept in mind. Such cases can be managed using a minimally invasive approach, assuming an optimal surgical setting.

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